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Rural Lines

RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

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Weekender: Part-time Consumer

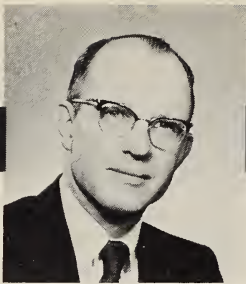


Co-op Meetings for Seasonal Residents

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A Message from the

ADMINISTRATOR

The Waushara County Electric Cooperative in Wisconsin came up with a wise and farsighted idea that could be adopted by every REA borrower with a large percentage of nonresident members. The Waushara co-op held meetings in the city for its urban members who own lakeshore cottages on the system. It is bound to gain from the wide experience of its city members who now have an enthusiastic interest in their co-op. Also, the conflicts of interest between the two groups can best be settled if they are all playing on the same team.

Since I am from an arid western State, I am especially interested that even a paradise of lakes like Waushara County has a water usage problem. Practically every watershed in the Nation seems to have one nowadays.

The population is growing and using more water per capita. Farmers need more water. Industry needs it. More water is required for recreational purposes. Sanitation troubles arise from the water supply as cities get bigger. Every man, rural or urban, has an acute interest in the watershed on which he lives.

That is why U.S.D.A., as its major contribution to National Farm-City Week, this year is stressing water and watershed problems. It is a problem on which everyone must get together.

Every borrower in the country should take the initiative and go to town for meetings with their urban neighbors—all the people in town, not just those who are members—during Farm-City Week, which falls on November 20-26 this year. You don't have to go further than your city's service club or other civic group to find the cooperation which will make your meeting a big success.

A Farm-City Week sponsored by your electric co-op or telephone company will help solve your watershed problems, and help build good will.

Rural Lines

Administrator.

John H. Howard, Editor. Contributors to this issue: Milton Chase, Hubert W. Kelley, Jr., Fred McVey.

Cover Page: Fishing is a favorite sport on the lakes of Waushara County.



WAUSHARA WENT TO TOWN— with member meetings



It cost \$142 to get a turnout of 50 percent," said Howard Gaylord, board member of the Waushara County Electric Cooperative, of Wautoma, Wis. "I believe it is the best money we ever spent, from the standpoint of the results it will bring."

Gaylord referred to the special meetings the central Wisconsin co-op has held in recent winters for non-resident urban members at Oshkosh and Milwaukee. The idea of special annual meetings was the brainchild of Manager Gordon Meistad, who saw a real problem shaping up on his system a few years back.

The problem was that an increasing percentage of co-op member consumers were "lakers," as seasonal summer residents from the cities are called in that region.

The "lakers" knew little about their co-op, and were developing an antipathy toward it and toward the community.

The summer residents own cottages on the 19 fine little lakes whose shores are served by the Waushara County co-op. They live in Milwaukee, Chicago, and the paper-making cities of the Fox River Valley 50 miles eastward. Most of them seldom see their summer places during 9 months of the year. While some of them had been active in getting the co-op lines to serve their particular lakes, most of them regarded their co-op simply as they did the public utility company in their home city. A public utility, to the average seasonal cottage owner's way of thinking, must make money or they wouldn't stay in business. That they must be making money at the expense of the "lakers" was apparent to them, since they paid a higher rate than the farmers.

The summer residents who didn't understand the nature of the cooperative and their relationship to it caused less trouble than some of those



Manager Gordon Meistad chats with Member Emery Gaylord.

who did. Few of the latter had ever been to an annual meeting, held in Wautoma in the middle of the winter. Therefore, they had no real knowledge of their co-op's problems. They only knew what they could see: the farmer members who really ran the co-op had a lower rate than they did. Therefore, these farmers must be getting a cheap ride on their electric bills at the seasonal residents' expense. A bitter stepchild feeling was beginning to develop among the "lakers."

Some farm members were aggravating this feeling. A few viewed the seasonal residents as detrimental to their interests. The "lakers," they knew, created a high summer peak on the system's lines, making rate raises necessary. These farmers, Manager Meistad noted, tended to be wholly unaware of the principle of area coverage, or of the fact that the summer cottage owners were a mainstay of Waushara County's economy.

Waushara County's economy includes no industrial loads for the co-op nor any incorporated towns or villages on its lines.

The region has a sandy soil, productive enough when there is plenty of moisture, but very unproductive in dry weather. The county's dairy and



SCHROEDER

potato farmers don't have a very high income by Wisconsin standards, but rate very well in the national average for farmers.

The co-op got its first loan not long before Pearl Harbor was attacked, which meant that most of the construction of its 750 miles of line was done in the costly post-war years, and earnings didn't begin until that time. Of the 2,600 consumers on its lines, more than one-third were seasonal by 1957.

There wasn't much in the way of industrial load that could be promoted to offset the low load factor, Meistad realized. Industry would require water in large amounts. Use of water for irrigation during the severe drought of recent summers had been blamed for a drop in the level of lakes by sportsmen and seasonal residents. Too much of a drop in the level of the lakes could ruin fishing and boating, they said, which would ruin the region's leading industry. While it hadn't been proven to date that use of the water had lowered the lake levels, rather than drought itself, neither had it been disproven. As long as people believed it, it was a threat to the resort business.

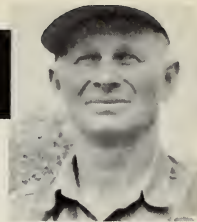
Meistad and the Waushara County co-op's board decided to put on a series of educational meetings for the seasonal members similar to the nine district meetings the co-op was planning to hold. The first was held in Oshkosh. More than 200 attended



NELSON



MRS. NELSON



GAYLORD

out of the Fox River Valley's 400 members. The second meeting, in Milwaukee, drew 200 from the metropolitan area, about the same high proportion.

A brochure sent to each seasonal member preceded the meeting. Coffee and refreshments were served to all comers. Both meetings resulted in a happy time for the members. The sophisticated city dwellers met old friends and lakeside neighbors seldom or never seen in the city before. The meetings had very much of the "old home week" atmosphere of a mid-winter annual meeting in the country.

The question and answer periods were even livelier than those held at Wautoma, Meistad says. He explained the difference between their service in the city, with one entrance serving several families, to the three to the mile Waushara investment, from the standpoint of cost. He gave them some history of their co-op, and pointed out the favorable rate they received in comparison with other electric systems serving rural areas. He made a status report, with a complete breakdown of costs and revenues. At the end of both meetings, the urban members of his rural co-op were beginning to wax enthusiastic about their organization.

"Next year we hope to have a meeting in Chicago. And we hope to continue those in Oshkosh and Milwaukee," announced Meistad. "The board agrees with me that these are

the most enthusiastic members we have, as a result of these meetings. And I think they are going to contribute the most, too, in the way of ideas and good advice, from now on out. No co-op that has a large share of nonresident members should fail to inform and to cultivate them. They can be the best members on the line."

Rural Lines interviewed both rural and urban members of the Waushara County system recently. Excerpts of their views are included here.

Walter A. Schroeder, West Allis, retired manufacturer . . .

"They did a good job of putting the story across. I'm moving up to the lake permanently, and I'm going to make my place all-electric. So I was interested in getting a good crowd out to the meeting. I called up a couple of my neighbors. They had more than 200 people at the Milwaukee meeting. It was a real success."

Mrs. Carl Beck, West Allis, housewife . . .

"I enjoyed the meetings so much. The panel were so polite in answering the questions some hecklers asked. I'm sure it made us all feel like we were a part of the co-op. I met a lot of old friends there who I never see while I'm up at the lake." Mrs. John Washburn, Milwaukee, housewife . . .

"I got a lot out of it; what a hard job it is to run the co-op and all. We were the last to get electric lights on



MRS. RACH

our lake. I plan to retire up there. People in the country are all so friendly."

Peter Quartana, Milwaukee, retired businessman . . .

"Well, I am more satisfied with the co-op than I was before the meeting. We got a better rate for hot water heaters out of it, and a better understanding all the way round. We city people could help that co-op a lot."

Howard Gaylord, Waushara County farmer . . .

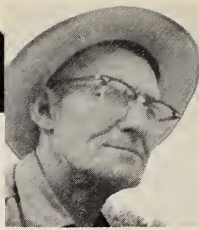
"I went to the meeting in Oshkosh. It was the best annual meeting I ever saw. It can't help but do a lot of good. It was \$142 well spent."

Fred Harasha, co-op office manager . . .

"The city members are getting to be among our best."

Ben Sobieski, Waushara County farmer . . .

"Those lakers seemed more interested in what was going on than people who are around here all the time. They can do us a lot of good." Glenn Detlor, Waushara County farmer . . .



GEAR

"The local people and the lakers have got to get together. You can't run a co-op unless everyone sticks together. Those meetings are a great idea."

Archie Gear, Wautoma, farmer and board president . . .

"It was good to find out what the city folks thought of us. We got a lot of problems facing us in the future, and we have to have more meetings to keep everyone informed."

Joseph J. Schuster, Wautoma, retired judge . . .

"This lake is the greatest place in the world to live. I live here now the year round. A lot of the lakers are going to settle here on retirement. If they know what co-op problems are, they'll make better members."

C. R. Dhein, Witter Lake, retired prison official . . .

"We lakers stick together pretty well on our problems up here. The co-op board was pretty smart to put on those meetings."

W. A. Wagner, Oshkosh, cost accountant . . .

"I'm from the Wautoma area orig-

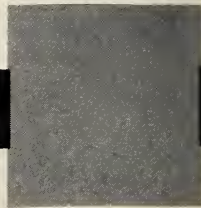


WAGNER

ROGERS

DR. BITTER

MRS. BECK





Mr. & Mrs. SOBIESKI



WOOD



DHEIN

inally, so the co-op and its problems are an old story to me. There is a lot of beef from the city people about rates, because they don't understand the problem. The meeting was a good idea."

Don Rogers, Oshkosh, soft drink distributor . . .

"I hope they have another meeting soon. The one they had was a dandy. Not long drawn out. They explained everything in a simple way."

Mrs. H. E. Rach, Appleton, housewife . . .

"We liked the meeting. We were particularly interested in what other people thought about it, since we have had long experience in the appliance business. We had no gripes ourselves, but there were several about outages and service. People don't stop to think that we have outages in town also."

Robert M. Wood, Neenah, paper mill executive . . .

"I think there will be a trend to annual meetings for seasonal people. They can contribute a lot in the way of ideas—particularly ways to promote power use."

Mrs. N. P. Nelson, Oshkosh, dean of women, Oshkosh State College . . .

"It was a fine meeting. The board and manager certainly know how to run a democratic institution like a cooperative."

N. P. Nelson, Oshkosh, educator . . .

"I hope they have many more such meetings. The meeting here was a great success. It made us proud to be members of our cooperative."

Dr. R. H. Bitter, Oshkosh, physician . . .

"The people from Wautoma did a pretty good job of putting across the story of the operation. It is a good operation which many city people hadn't understood before. The only fault I could find was that the meeting was too long drawn out and repetitious."

Orville Hando, Oshkosh, meat dealer . . .

"I'm all for that co-op. We wouldn't have had electricity at the lake, if it hadn't been for them. They need diplomacy, though, in dealing with city people. Maybe these meetings will help."

HARASHA



Mr. & Mrs. HANDO



DETJOR



a new concept of



Electric

RESISTANCE HEATING

by Fred McVey, Assistant Chief, Electric Operations and
Loans Division

Most rural electric systems now have at least a few electrically heated homes on their lines. It is a load that some are actively promoting. Others adopt a cautious, wait-and-see attitude. There are several reasons; usually it is because they aren't sure of the effect that the electric heating load may have on their systems' operation.

They are afraid that they may throw the load factor out of line with an excessively high peak. These fears may be unfounded. A new concept of electric heating may be applied to house design that would prevent such peaks by taking advantage of the heat produced by electrical appliances and by the inhabitants of the household.

This concept assumes three conditions, and they are conditions found in any *properly constructed* electrically heated home. First, the electrically heated home must be an all-electric home (statistics show that most of them are); second, each room of the electrically heated home must be equipped with a separate close tolerance thermostat (any properly engineered electrical heating installa-

tion using resistance heating is equipped this way); and third, the house must be effectively insulated (this is a prerequisite to satisfaction in any electrically heated home). When you have all three of these conditions, the operating heat factor * of installation will, under normal conditions, range from .20 down to .15.

Under these conditions the incremental demand on the distribution system at time of system peak will not exceed 1½ kw for a 1,000 square foot home at 0° F design temperature. To more clearly understand why this is true, look at the chart illustrating this article. The figures were determined by first listing each electrically operated appliance used in such an all-electric home. Next, the periods of use for each appliance during a 24-hour period was established. The wattage of each appliance was noted, from name plate data and labels, and was tabulated. This data, along with a computation of the

* The annual kilowatt hours divided by the degree days divided by the cubic feet of heated area expressed in thousands.

body heat gained from all the occupants of the home (converted to watts), provides the figures needed to draw this chart.

The horizontal line close to the top of the chart represents the total heat loss from an effectively insulated 1,000-square-foot house at 0° F design temperature. The amount of heat, then, that must be supplied by the electrical heaters at any time during the day is determined by measuring the distance between the horizontal line on top and the line below, which represents the heat gained from appliances in use and from the house's occupants.

It will be noted in this illustration that the period of maximum use of electrical appliances is from 5:30 PM to 6:30 PM and is approximately equal to 6,500 watts. The heat loss at that same time is 7,500 watts. The conclusion that we reach from this is that if the outside tempera-

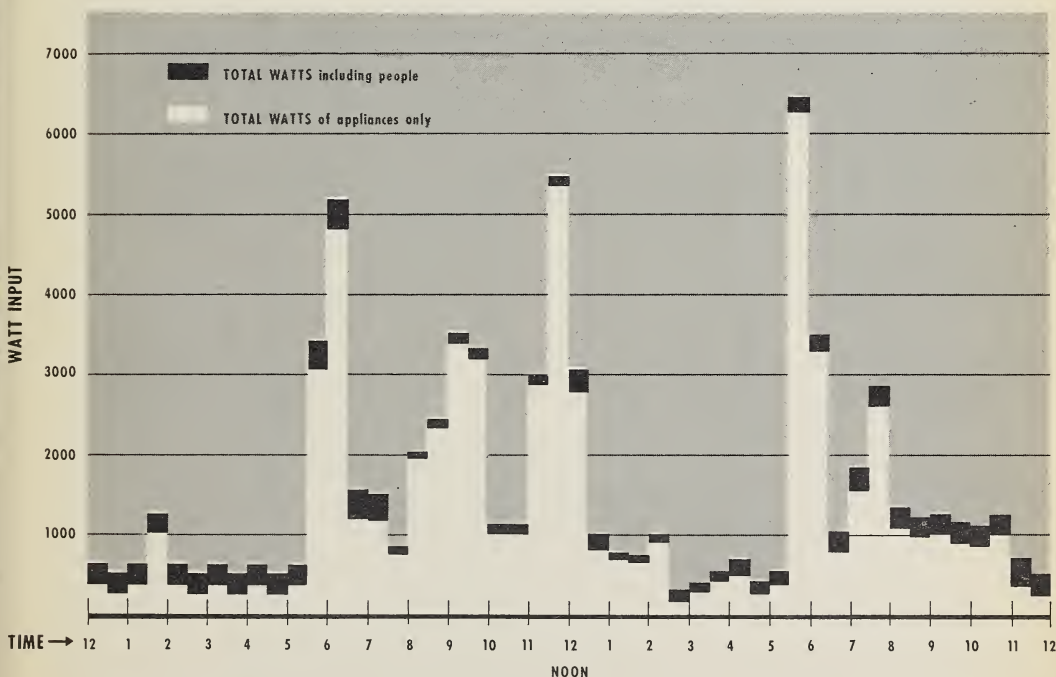
ture were 0° F, only 1,000 watts or 1 kw of electric heat would be needed.

The operation of the sensitive close tolerance thermostats would have disconnected the other heaters and the incremental demand added to the system peak by this installation would be approximately 1 kw.

Homes not effectively insulated would have heat factors ranging from .25 upward, and in these the heat loss at time of maximum electric use would be excessive. The result there would be a higher incremental demand placed on the system or discomfort experienced by the occupants of the house.

This concept should be considered when installing electric heating equipment on any rural system. Then sales may be promoted without fear of disrupting the normal operation of the system. Also, the co-op will have completely satisfied customers — always the best salesmen.

WATTS HEAT LOSS AT DESIGN TEMPERATURE



FIRST CHANCE TO GET WARM



Midwestern farm families in older houses find that electric space heating is the most practical replacement for wood and coal stoves.

Around Kansas City, say two Farm Belt co-op managers, an old house is just as good a bet for electric space heating as a brand new one.

"It may be even a better bet," according to Howard Alexander, who manages the Platte-Clay Electric Co-operative, in Platte City, Mo. Since the co-op began promoting electric heating 3 years ago, 75 home owners already have switched over. Alexander expects to see another 100 installations in his service area before 1959 ends.

"About half the installations are in old houses," says Alexander, "and there are good reasons for that. Many of the older homes in our area weren't built for central heating—no basements or ductwork. Putting in central heating would have been prohibitively expensive. Electric space heating represents the first opportunity these home owners have had to make their houses modern."

But that's not the only reason that old houses are his favorite prospects, Alexander explains.

"We want every convert to electric space heating to be satisfied," he says. "Can you imagine a more satisfied

consumer than a farm family that is warm during the winter for the first time? After years of huddling around a wood stove for warmth when it's 10° above outside, electric heating feels too good to be true."

Alexander admits that there's still a third reason why he likes the old house market.

"There are so many more of them," he laughs.

Insulation hasn't proved much of a problem in the Platte-Clay area. A large proportion of the older homes have but one horizontal fire barrier in the walls, making it possible to blow insulation into walls from the top and bottom.

Across the Missouri River, at the Leavenworth-Jefferson Electric Co-operative, in McLouth, Kans., Manager Jim Watson also has been taking a good look at prospects among older homes. Of the first 7 heating installations in his service area, only 2 were in new homes.

"The owners of these houses are proving our best salesmen for electric space heating," notes Watson. "Fortunately, not one of them was noted for being reckless with his money. When



Drawing of coal stove was given to Manager Howard Alexander by the Calverts, recent converts to electric space heating. Thanks to his co-op's efforts, the stove soon may be an historical curiosity.

they talk about heating costs, the people around here listen to what they have to say."

One such consumer is Roy Hayes, whose electric ceiling heating was installed last November. For Hayes, a dairy farmer, electric heat replaced two wood-burning stoves.

"I can justify electric heating on a cost basis," reports the farmer. "I figure that in the time it takes me to cut wood for my stove, I can put up hay for one cow. I can milk one cow in the time it takes to carry fuel and ashes. In other words, electric heating gives me time to care for one more cow—and the milk from that cow pays my heating bill."

Hayes keeps a log of what his electric heat has cost him—as well as other cost computations.

"I've also figured that even if the wood were on my place," ponders Hayes, "I couldn't hire a man to cut the wood for the cost of electricity."

On the basis of his log, he figures that his heat bill will average less than \$1 a day from October 1 to May 1, and he hopes to get it down to 75c a day. Hayes insulated his



Dairy farmer Roy Hayes has kept a log of wind, temperature, and his meter reading each day since electric heating was installed in his home. Neighbors find it interesting reading.

house himself after the heating was installed, and he saw his kwh usage fall dramatically as insulation neared completion.

So far, the Kansas co-op hasn't been bothered by a high peak load, but Howard Alexander in Missouri reports that he has put a peak load control on each house heating installation.

The timing equipment shifts the space heating and the hot water heater from 240 volts to 120 volts between 5:45 p.m. and 7:15 p.m. each day.

Hayes insulated his home himself, dropping rock wool into the walls from the attic and tamping it down with a weight on a string.





At new, man-made Lake Dabinawa (peace & quiet) in Kansas, hundreds of year-round homes will be all-electric. The housing contractor told co-op Manager Jim Watson that "electric heating is the best thing that ever happened to our business."

"Some people remark about the drop in warmth the first year," he says, "but they learn to live with it by the second winter."

The Platte City co-op has stayed out of the contracting business. Seventeen local dealers were picked to participate in local promotions back in 1954, and when house heating came along, four of them were trained in electric heating by Power Use Adviser Blake Anderson. Anderson makes heating estimates or checks those of at least two qualified dealers.

Promotion for Platte-Clay is

handled by Mrs. Fran Allen. She has arranged for hundreds of consumers to visit the first electrically heated homes in the service area, and the turnout at each open house has exceeded expectations.

A typical tour was at the home of Mr. and Mrs. Clarence Calvert, in Turney, Mo. Neighbors were invited to see the installation on a Sunday afternoon, and more than 200 came in response to direct mail invitations and local newspaper ads. Mrs. Allen saw to it that paper was down along the line of march through the house and that a member of a local women's club stood guard in each room. The women cleaned up for the Calverts after the tour.

Mrs. Allen also presents an "All-Electric" sign to each consumer who uses electricity for all heating and cooking.

"When we talk to housewives about electric heating," she says, "we stress cleanliness and safety."

Although Manager Alexander believes that he leads all other co-ops in his State in house heating installations, he emphasizes that he has moved cautiously, examining each prospect with care.

"We won't approve our house heating rate for just any house," he observes. "We make sure in advance that the thing's going to work. After all, we're not in business to make sales, but to give service. These people are my friends."



Promotion specialist Fran Allen shows some of the tools of her trade. She calls an open house "a very effective way" to demonstrate house heating.

Rural Lines



Lock All Freezers And Refrigerators

Home freezers and refrigerators can become tombs for curious, imaginative children.

It almost happened 2 years ago to the 4-year-old son of Wallace Mays, lineman for the Gibson County Electric Membership Corporation of Trenton, Tenn.

Wallace Mays was on vacation on the day of the near tragedy. He was at home with little Gail Mays while the boy's mother was shopping. Wallace was busy with some work about the house, and it occurred to him later that he had not noticed Gail for about 2 hours before the moment Mays stepped into the garage. As he did so, he heard a thumping sound on the door of the home freezer, which was located in the garage.

Just the day before he had cleaned out the freezer's lower shelves, to get it ready for storing a side of beef. It had been necessary to saw off the lock on the freezer, which he hadn't yet replaced.

Wallace opened the door, and there was little Gail, on his knees in the lower compartment. The boy was too cold to talk at first, and his kneecaps were badly blistered from the frost. Mays estimated that he had been there almost 2 hours, and that he could not have survived much longer. Prompt medical attention by Mays and by Co-op Manager Floyd Jones and Mrs. Jones brought the boy back to normal quickly.



Mr. & Mrs. Wallace
Mays and son Gail.

"All freezers are magnets for small boys and girls," says Mays. "They should be kept locked. And the doors should be removed from all old abandoned freezers and refrigerators. Kids love to hide in them. They are deathtraps."

HERE'S YOUR TV PACKAGE

The new safety TV package, USDA TV Package #336, entitled *Electricity, Treat It with Respect*, is now available at no cost from Information Services Division, REA, South Building, Department of Agriculture, Washington 25, D. C.

SAFETY BOX SCORE—10
10 men have been killed on
borrowers' systems during
1959.



POWER for RURAL PUERTO RICO

By Milton Chase, Assistant Chief, Electric Engineering Division

One of REA's most interesting borrowers is on an island in the Caribbean Sea. It is the Puerto Rico Water Resources Authority, which, like all borrowers, has special needs and special problems. One of them is the problem of rural electrification, which it is solving with the help of REA.

The Authority, an insular government corporation, had its genesis in 1908 as the Puerto Rico Irrigation Service, created for the purpose of impounding the waters of the Carite River, with 700 kw of hydroelectric power as a byproduct. Since then, additional hydro developments were constructed, the facilities of several utility systems were acquired, steam generating plants and a transmission grid were built—so that the Authority now operates an integrated system covering all of the island.

To the electric system planner, this may seem like paradise, as may also the equable climate of the island. However, the picture is less than idyl-

lic when one considers that Puerto Rico is largely a mountainous land, and the average income of the densely populated island is very low, and that the population continues to shift from the agricultural areas to the cities and to the U. S. mainland.

The Authority's program for rural electrification cannot be divorced from the island's famous Operation Bootstrap, which has attracted widespread attention. Based upon the commonwealth status of the island as approved by the U. S. Congress, Operation Bootstrap covers many phases of Puerto Rican life: industry, tourism, education and agriculture. Essential to the program is an adequate supply of low-cost power available to growing industry and commerce and to all the inhabitants of the island, no matter how remote from the island's cities.

During the early post-war period the Authority struggled to devise a feasible plan to assure area coverage. By 1952 the details were worked out

◀ **A rural electrification
meeting in Puerto Rico.**

and one could look forward to the time when the island would be 100 percent electrified. The program is simple, but it took the experience of several experimental years to prove its feasibility.

1. For those who can afford to guarantee the minimum consumption to justify the necessary capital investment or for those willing to contribute that part of the investment to make electric service economically feasible, the Authority will make service available without delay.

2. For low income rural families who cannot afford to pay a high enough guaranteed minimum bill, service will be available through the special rural electrification program, which involves REA financing plus annual payments from the Commonwealth Government to the Authority, covering the difference between the revenue derived and the cost of service. To date, the Commonwealth has voted more than \$1.5 million for this purpose.

Experience has proved that in a matter of 5 to 10 years, when average consumption reaches 75 kwh per month, the increased electric usage of Puerto Rican low income families is sufficient to put the rural electrification projects on a payout basis. To complete the job of rural electrification, the Authority expects to



In mountainous Puerto Rico, helicopters carry and set poles.

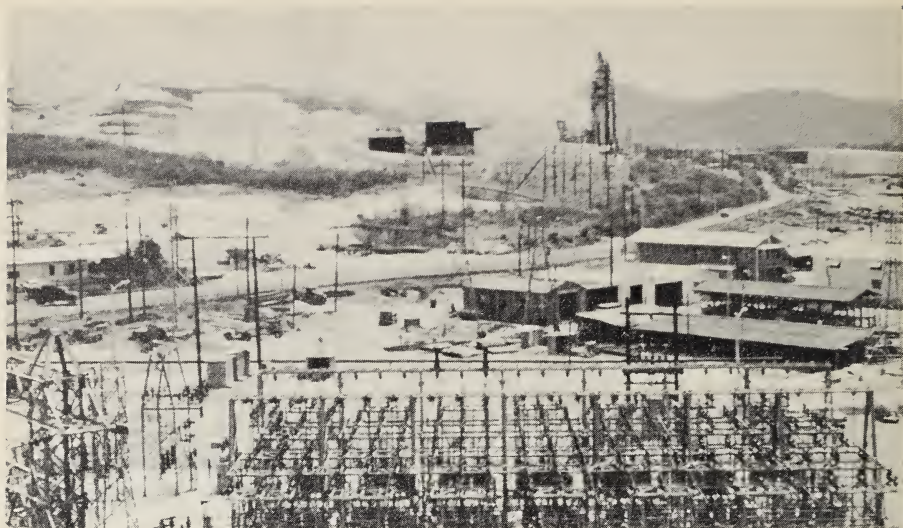
bring service to an additional 100,000 families during the next 6 years, at the rate of 16,000 per year. Puerto Ricans consider this expenditure a wise investment, in order to make available one of the basic conveniences of twentieth century living to all the inhabitants of the island.

Since 1952, REA has loaned the Authority \$22.4 million for the construction of distribution lines and for the construction of a 44,000 kw steam turbine. This unit was installed in the Authority's South Coast plant, in a fast growing industrial area west

**This rural
Puerto Rican
home represents a low,
but not lowest,
rural income
bracket.**

August 1959





An industrial complex is growing near this rural Puerto Rican power plant.

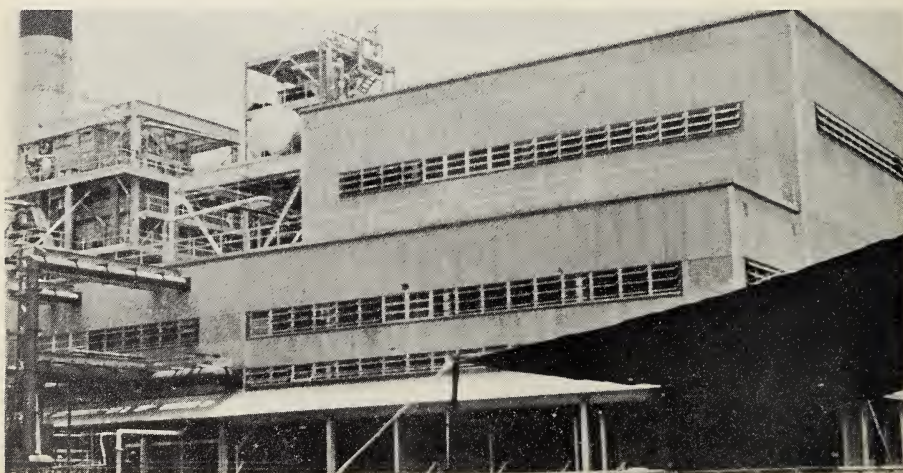
of Ponce. In March of this year the Authority dedicated this unit and in connection with it, held a seminar on rural electrification. Representatives from the mainland and from Latin American countries assembled to exchange ideas.

Puerto Rico was a fitting host to bring together such diverse problems and viewpoints. Geographically the island serves as an important bridge between the U. S. and Latin America. South and Central Americans regard Puerto Rico as an example of

what they may accomplish industrially and technically. The island helps North Americans understand their Latin neighbors.

Although its main purpose is to bring light and power to the low income rural resident and his family, the rural electrification program in Puerto Rico has many indirect benefits—as it has had elsewhere—on production, industry, commerce and education—and, in Puerto Rico, on international relations as well.

New generating plant near Ponce.



PETRIFIED WOOD SELLS toll service



Holbrook is a small town on Highway 66, in Arizona's cow country. It is an up-and-coming town, and Ed Jennings has found that it is an amazingly good area for long distance calls to stations all over the United States.

Jennings, an alert and energetic young Texan, is vice president and general manager of the Western States Telephone Corporation, which operates in New Mexico and Texas as well as in Arizona.

The reason for Western States good toll business is the town's accessibility to tourist centers. Holbrook lies on the western edge of the Painted Desert, and it is a half-hour hop, skip and jump from the Petrified Forest. On down Highway 66 to the west is Flagstaff, the jumping off place for the Grand Canyon.

Consequently, the Holbrook neighborhood is well equipped with first-rate motels, some of them quite large and luxurious. There were more than one million tourists registered last year at the Petrified Forest and Painted Desert. Forty to fifty percent of them, heading westward to the Grand Canyon, stay overnight in or near Holbrook. Others, coming

from the Canyon in the afternoon, stay in Holbrook on their way east in order to see the Painted Desert and Petrified Forest in daylight.

These tourists call home.

"Hello, mom, here we are on the way to the Grand Canyon," or "Guess what, we just talked to a real live Navajo Indian."

Western States toll business has increased 30 percent in recent months. When the Western States Corporation acquired the Holbrook exchange, it averaged 450 completed calls daily. The average is now more than 800, and Jennings expects it to go to 1,000 this season.

Some of the increase is due to improved service, as lines are completed and cut over. More of it is due to the top-notch selling job done by the people at Western States.

The company has its own toll center, and has spent a quarter of a million dollars in improving toll facilities, including much carrier equipment. It has so far increased its toll circuits from 10 to 39 on the Holbrook system.

Since Western States received its A loan in May 1957, its outside plant has been entirely replaced. When the



C. H. Jennings, left, talks shop with John Warren, auditor, and Mrs. Harriet Humes, billing office supervisor.

company acquired the system it had 2,000 stations, of which 800 were on common battery and the rest magneto. There were 1,240 stations on the Holbrook exchange. There are now 2,600 on the Holbrook exchange, served by five unattended toll exchanges at Show Low, Snowflake, Taylor, Lakeside, and Pinetop.

The company has recently applied for a B loan for two new exchanges, over 275 miles of rural lines to Alpine and Heber, Arizona. The B loan will also allow for needed warehouse space and additional office expansion. The A loan of \$2,932,000, covered five counties in three states. It took only 9 months to complete the loan.

Neither the original branch, at Fabens, Texas, nor the New Mexico branch, at Truth or Consequences, has yet been cut over.

Fabens is the home of C. H. Jen-

nings, president of Western States and father of Ed Jennings. All stock is held within the Jennings family. Ed Jennings began his telephone career at Fabens, after attending Texas Western College at El Paso, where he majored in business administration.

Fabens is in the cattle and cotton country of West Texas, and is the site of one of the United States' six satellite tracking stations, which is creating a building boom.

Truth or Consequences, N. M., is also enjoying growth. The Elephant Butte Dam on the Rio Grande River is on that system, and the area is increasing as a fishing and health resort. A new military base is to be located there.

The three parts of the Western States system are operated as branches, but all as part of the same system.

The sales effort put forth by the Jennings organization is apparent as one approaches their spic-and-span new headquarters building. Inside a picture window by the door is a rack of colored telephones. Mr. John Warren, office manager, says they have sold 100 colored telephones since the Holbrook cutover at midnight, on January 31, 1959. The display is floodlighted at night.

Inside the door the eye meets two telephone booths, equipped with attractive colored coin box telephones. Alongside is a rack full of telephone directories for practically all of Arizona and nearby western states. Jennings is sure that the power of suggestion has sold a lot of toll calls. He has several public booths on the streets and highways, and in the area of Show Low, a mountain resort 50 miles south. He plans to equip these with colored telephones as soon as they are available.

Western States maintains a full time commercial representative, who uses a door-to-door survey technique. He has had good success in selling extension telephones. About 25 percent of subscribers now have extensions. He has also sold five accounts on an answering service, and several PBX boards. Nine PBX's are now in operation in town, five of which are Western States' boards. Four of these are in motels. Two motels in Show Low are also equipped with PBX.

Jennings gives much credit to his staff, some of whom came with him from Texas. Orville Schureman, plant superintendent, he credits with the fast job of building. John Warren, the auditor, is responsible for office efficiency. With automatic equipment, it takes just one day to complete billing.

Two new exchanges will be cut over before this issue goes to press, St. Johns and Springerville. St. Johns, a cattle town, has five new producing oil wells brought in recently by a wildcatter, the first in the region.

Jennings is optimistic about the future.

On his Lakeside exchange is Smith Park, a growing mountain country club development in the Ponderosa pines. It has Hon Dah, an Apache Indian tribal enterprise on the Fort Apache reservations which also has a gas station and a dozen cabins. Since they are constantly filled up, and the demand is great, the Apaches are planning to expand, to include a golf course and lake.

Show Low, a lumber and resort town, is growing rapidly. It had 295 stations at cutover time 18 months ago, now has 340.

The Alpine area also plans to expand, to include an 18-hole golf course.

The Park Service is also developing the Petrified Forest, to include 32 resident buildings, a school, and a Harvey House. They are spending \$10 million on the project.

Jennings has extended service to the Navajo and Fort Apache Indian reservations.

Ed Jennings, left, looks on as Mayor Art Whiting, calls REA at cutover time. On right is S. A. Watt of Mountain States Telephone Co.



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